PROJECT: SRMS ASS'Y NOMENCLATURE: EEEU SYSIEM: ELECTRICAL SUBSYSIEM ASS'Y P/N: STIGOFTI74-3E-5 ___ SHEET: __1 THEA THEA NAME, OTY, & FATILITY HORE FAILURE STEERS

THEA FREA. REV.		FAILURE MODE AND CAUSE MODE: LOSS OF ALL EE PRIMARY FUNCTIONS. CAUSE(S): (1) U21, U22, U27 D OR C FAILS	FAILURE EFFECT ON END ITEM ARM REMAINS LIMP UNTIL EE MODE SM TO DFF DURING AM AUTO CAPTURE SEQUENCE, CAUSE (1): EEEU WILL NOT PRODUCE A "MOTOR ENABLE"	HDUR / FUNC. RATIONALE FOR ACCEPTANCE Z/TR CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS DESIGN FEATURES THE DESIGN UTILIZES PROVEN CIRCUIT TECHNIQUES AND IS IMPLEMENTED USING CMOS LOGIC DEVICES. CMOS DEVICES OPERATE AT LOW POWER AND HENCE DD NOT EXPERIENCE SIGNIFICANT OPERATING STRESSES. THE TECHNOLOGY IS MATURE, AND DEVICE RELIABILITY HISTORY IS WELL DOCUMENTED. ALL STRESSES
		U22D FAILS L. CAPACITOR C37 FAILS S/C. (2) U188 FAILS L. (3) U12 A, B OR C FAILS HIGH OR LOW.	TO MOTOR DRIVE. NO COMMANDS VILL BE IMPLEMENTED. CAUSE (2): EEEU WILL MOT PRODUCE BRAKE/ CLUTCH ACTIVATE SIGNALS. MOTOR WILL SLIP CLUTCH FOR ANY COMMAND. CAUSE (3): MOTOR MAY SLOW DOWN AND STOP. MOTOR WILL HOT START. SMARES MAY OPEN WITH REL CHD. EEU BITE MAY NOT DETECT. WORST CASE UMEXPECTED PAYLOAD MOTION.	ARE ADDITIONALLY REDUCED BY DERATING THE APPROPRIATE PARAMETERS IN ACCORDANCE WITH SPAR-RHS-PA.003. SPECIAL HAMDLING PRECAUTIONS ARE USED AT ALL STAGES OF MANUFACTURE TO PRECLUDE DAMAGE/STRESS DUE TO ELECTROSTATIC DISCHARGE. ALL RESISTORS AND CAPACITORS USED IN THE DESIGN ARE SELECTED FROM ESTABLISHED RELIABILITY (ER) TYPES. LIFE EXPECTANCY IS INCREASED BY ENSURING THAT ALL ALLOWABLE STRESS LEVELS ARE DERATED IN ACCORDANCE WITH SPAR-RMS-PA.003. ALL CERAMIC AND ELECTROLYTIC CAPACITORS ARE ROUTINELY SUBJECTED TO RADIOGRAPHIC INSPECTION.
PREPARED SY:	MFLIG	SUPERCEDING DATE	INCOMPLETE CAPTURE/RELEASE SEQUENCE. UNABLE TO RELEASE PAYLOAD. CREW ACTION REG. REDUNDANT PATHS REMAINING BACKUP EE RELEASE.	APPROVED BY: DATE: 26 JUL 91 CIL REV: 1

PROJECT: SRMS ASS'Y NOMENCLATURE: EEEU

SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: 51140F1174-3E-5

		HAME OTY & DRAWING REF. DESIGNATION	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END ITEM	HDUR / FUNC. RATIONALE FOR ACCEPTANCE 2/IR CRETICALITY SCREENS: A-PASS, U-PASS, C-PASS
3330	3	COMMAND LOGIC GIY-1 REFERENCE SCHEMATIC 2563765	MODE: LOSS OF ALL EE PRIMARY FUNCTIONS. CAUSE(S): (1) U21 U22 U27 D OR C FAILS H. U20 FAILS L. CAPACITOR C37 FAILS S/C. (2) U188 FAILS L. (3) U12 A, B OR C FAILS HIGH OR LOW.	ARM REMAINS LIMP UNTIL EE MODE SW TO OFF DURING AN AUTO CAPTURE SEQUENCE. CAUSE (1): EEEU WILL NOT PRODUCE A "MOTOR ENABLE" TO MOTOR DRIVE. NO COMMANDS WILL BE IMPLEMENTED. CAUSE (2): EEEU WILL NOT PRODUCE BRAKE/ CLUTCH ACTIVATE SIGNALS. MOTOR WILL SLIP CLUTCH FOR ANY COMMAND. CAUSE (3): MOTOR MAY SLOW DOWN AND STOP. MOTOR WILL NOT START. SMARES MAY OPEN WITH REL CHO. EEEU DITE MAY HOT DETECT. WORST CASE WERPECTED PAYLOAD MOTION. INCOMPLETE CAPTURE, PELEASE SEQUENCE. UHABLE TO RELEASE PAYLOAD. CREW ACTION REQ. REQUINDANT PATHS REMAINING BACKUP EE RELEASE.	ACCEPTANCE TESTS THE EEEU IS SUBJECTED TO THE FOLLOWING ACCEPTANCE ENVIRONMENTAL TESTING AS AN SRU. O VIBRATION: LEVEL AND DURATION REFERENCE TABLE 6 O THERMAL: +70 DEGREES C TO -25 DEGREES C (1 1/2 CYCLES) THE EEEU IS INTEGRATED INTO THE END EFFECTOR AND IS FURTHER EXPOSED TO THE END EFFECTOR ACCEPTANCE TEST ENVIRONMENTS (VIBRATION AND THERMAL VACUUM). THE END EFFECTOR ASSEMBLY IS PART OF THE INTEGRATED RMS SYSTEM TESTS (TPST® RMS STRONGEACK TEST AND TPSS2 FLAT FLOOR TEST) WHICH VERTIFIES THE ABSENCE OF THE FAILURE MODE. QUALIFICATION TESTS THE EEEU IS SUBJECTED TO THE FOLLOWING SRU QUALIFICATION TEST ENVIRONMENTS. O VIBRATION: LEVEL AND DURATION REFERENCE TABLE 6 O SHOCK: 20G/11Ms - 3 ANES (6 DIRECTIONS) O THERMAL: +81 DEGREES C TO -36 DEGREES C (6 CYCLES) 1 x 10**-6 TORR O HUNIDITY: TESTED IN THE END EFFECTOR HUMIDITY TEST. D EMC: MIL-STD-461 AS MODIFIED BY SI-E-0002 (TESTS CEOI), CEOS, CSOI, CSO2, CSO6, REO1, REOZ (M/B) RSOI). FLIGHT CHECKOUT PORS OPS CHECKLIST (ALL VEHICLES) JSC 16987

PROJECT: SRMS ASS'Y NOMERCLATURE: <u>EEEU</u>

SYSTEM: ELECTRICAL SUBSYSTEM
ASS'Y P/N: STIGOFT174-JE-5

FMEA **FMEA** MAME, OTY, & DRAWING REF. **FAILURE MODE** FAILURE EFFECT HDWR / FUNC. RATIONALE FOR ACCEPTANCE REF. REV. AHD 2/18 DESIGNATION CAUSE END ITEM CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS 3330 3 COMMAND MODE: LOSS OF ALL ARM REMAINS **DA/INSPECTIONS** LOGIC 01Y-1 LIMP UNTIL EE HODE SW 10 OFF DURING AN AUTO REFERENCE EE PRIMARY FUNCTIONS. SCHEMATIC UNITS ARE MANUFACTURED UNDER DOCUMENTED QUALITY CONTROLS.
THESE CONTROLS ARE EXERCISED THROUGHOUT DESIGN
PROCUREMENT, PLANNING, RECEIVING, PROCESSING, FABRICATION,
ASSEMBLY, TESTING AND SHIPPING OF THE UNITS. MANDATORY 2563765 CAPTURE CAUSE(\$): SEQUENCE. (1) U21, U22, U27 D DR C FAILS CAUSE (1): EEEU WILL NOT INSPECTION POINTS ARE EMPLOYED AT VARIOUS STAGES OF FABRICATION ASSEMBLY AND TEST. GOVERNMENT SOURCE PRODUCE A "MOTOR ENABLE" INSPECTION IS INVOKED AT VARIOUS CONTROL LEVELS. U22D FAILS L. CAPACITOR TO MOTOR DRIVE. NO COMMANDS EEE PARTS INSPECTION IS PERFORMED AS REQUIRED BY SPAR-RMS-PA.003. EACH EEE PART IS QUALIFIED AT THE PART LEVEL TO THE REQUIREMENTS OF THE APPLICABLE SPECIFICATION. ALL EEE PARTS ARE 100X SCREENED AND BURNED IN, AS A MINIMAN, AS REQUIRED BY SPAR-RMS-PA.003, BY THE SUPPLIER. ADDITIONALLY, EEE PARTS ARE 100X RE-SCREENED IN ACCORDANCE WITH C37 FAILS WILL BE IMPLEMENTED. (2) U100 FAILS L. CAUSE (2): EEEU WILL HOT FACILITY. DPA 15 PERFORMED AS REQUIRED BY PA.003 ON A RANDOMLY SELECTED 5% OF PARTS, MAKIMUM 5 PIECES, MINIMUM 3 PIECES FOR EACH LOT NUMBER/DATE CODE OF PARTS RECEIVED. PRODUCE BRAKE! (3) U12 A, B OR C FAILS CLUTCH ACTIVATE SIGNALS. MOTOR HIGH OR LOW. WILL SLIP CLUTCH FOR ANY WIRE 18 PROCURED TO SPECIFICATION MIL-W-22759 OR MIL-W-81381 AND INSPECTED AND TESTED TO MASA JSCH8080 STANDARD NUMBER 95A. COMMAND. CAUSE (3): MOTOR MAY SLOW RECEIVING INSPECTION VERIFIES THAT ALL PARTS RECEIVED ARE AS DOWN AND STOP. DENTIFIED IN THE PROCURENTS DOCUMENTS, THAT IND PHYSICAL DAMAGE HAS OCCURRED TO PARTS DURING SHIPMENT, THAT THE RECEIVING DOCUMENTS PROVIDE ADEQUATE TRACEABILITY INFORMATION MOTOR WILL HOT START, SHARES MAY OPEN WITH AND SCREENING DATA CLEARLY IDENTIFIES ACCEPTABLE PARTS. REL CHO. EEEU BITE MAY NOT PARTS ARE INSPECTED THROUGHOUT MANUFACTURE AND ASSEMBLY AS APPROPRIATE TO THE MANUFACTURING STAGE COMPLETED. THESE DETECT. INSPECTIONS INCLUDE, WORST CASE PRINTED CIRCUIT BOARD INSPECTION FOR TRACK SEPARATION, DAMAGE AND ADEQUACY OF PLATED THROUGH HOLES, UNEXPECTED PAYLDAD HOTION. INCOMPLETE COMPONENT MOUNTING INSPECTION FOR CORRECT SOLDERING, WIRE LOOPING STRAPPING ETC. OPERATORS AND INSPECTORS ARE TRAINED AND CERTIFIED TO MASA MHB 5300.4(3-1) STANDARD. CAPTURE/RELEASE SEQUENCE. UNABLE TO RELEASE CONFORMAL COATING INSPECTION FOR ADEQUATE PROCESSING IS PAYLOAD. PERFORMED USING ULTRAVIOLET LIGHT TECHNIQUES. CREW ACTION POST P.C. BD. INSTALLATION INSPECTION, CLEANLINESS AND WORKMANSHIP (SPAR/GOVERNMENT REP. MANDATORY INSPECTION POINT) REDUNDANT PATHS REMAINING P.C. BD. INSTALLATION INSPECTION, CHECK FOR CORRECT BOARD INSTALLATION, ALIGNMENT OF BOARDS, PROPER CONNECTOR CONTACT MATTING, WIRE ROUTING, STRAPPING OF WIRES ETC., BACKUP EE RELEASE. PRE-CLOSURE INSPECTION, MORKMANSHIP AND CLEARLINESS (SPAR/GOVERNMENT REP. - MANDATORY INSPECTION POINT) PRE-ACCEPTANCE TEST INSPECTION, WHICH INCLUDES AN AUDIT OF LOWER TIER INSPECTION COMPLETION, AS BUILT CONFIGURATION VERIFICATION TO AS DESIGN ETC., (MANDATORY INSPECTION POINT).

PREPARED BY:

MFMG

SUPERCEDING DATE: 06 OCT 87

APPROVED BY: _

DATE: 24 JUL 91

CIL REV: 1

PROJECT: SRMS ASS'Y NOMENCLATURE: EEEU

SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: 51740/1174-38-5

FMEA REF.	FMEA REV.	NAME, GTY, & DRAWING REF. DESIGNATION	FAILURE MODE AND CAUSE	FAILURE EFFECT ON END LIEM	HDWR / FUNC. RATIONALE FOR ACCEPTANCE Z/IR CRETICALITY SCREENS: A-PASS, B-PASS, C-PASS
3\$30		COMMAND LOGIC GTY-1 REFERENCE SCHEMATIC 2563765	MODE: LOSS OF ALL EE PRIHARY FUNCTIONS. CAUSE(\$): (1) U21; U22; U27 0 OR C FAILS H. U22D FAILS L. CAPACITOR C37 FAILS S/C. (2) U188 FAILS L. (3) U12 A, 0 OR C FAILS HIGH OR LOW.	AMM REMAINS LIMP UNFIL EE MODE SW TO OFF DURING AM AUTO CAPTURE SEQUENCE. CAUSE (1): EEEU WILL NOT PRODUCE A "MOTOR ENABLE" TO MOTOR DRIVE. NO COMMANDS WILL BE INPLEMENTED. CAUSE (2): EEEU WILL NOT PRODUCE BRAKE/ CLUTCH ACTIVATE SIGNALS, MOTOR WILL SLIP CLUTCH FOR ANY COMPAND. CAUSE (3): MOTOR MAY SLOW DOWN AND STOP. MOTOR WILL NOT START. SNARES MAY DOEN WITH REL CHD. EEEU PLITE MAY NOT DETECT. WORST CASE UNEXPECTED PAYLOAD MOTOM. INCOMPLETE CAPTURE/RELEASE SEQUENCE. UNABLE TO RELEASE PAYLOAD REQ. REDUMDANT PATHS REMAINING BACKUP EE RELEASE.	A TEST PERSONNEL TEST DOCUMENTS, TEST FOUTPMENT CALIBRATION / VALIDATION SIATUS AND HARDWARE CONTROL SIST FOUTPMENT CALIBRATION / VALIDATION SIATUS AND HARDWARE CONTROL, SUPPLIER AS APPLICABLE, AND THE GOVERNENT REPRESENTATIVE, PRIOR TO THE START OF ANY FORMAL TESTING (ACCEPTANCE OR QUALIFICATION). ACCEPTANCE TESTING (ATP) INCLUDES AMBIENT PERFORMANCE, THERMAL AND VIBRATION TESTING, (SPAR/GOVERNMENT REP. INTEGRATION OF UNIT TO END EFFECTOR ASSY - INSPECTIONS INCLUDE GROUNDING CHECKS, CONNECTERS FOR BENT OF PUSHBACK CONTACTS, VISUAL, CLEANLINESS, INTERCONNECT WIRING ETC, AND POWER-UP TEST TO SPAR INSPECTION TEST PROCEDURE TIP-25ID. PRE-ACCEPTANCE TEST INSPECTION, WHICH INCLUDES AN AUDIT OF LOWER TIER INSPECTION COMPLETION, AS BUILT CONFIGURATION VERIFICATION TO AS DESION ETC., (MANDATORY INSPECTION POINT). ACCEPTANCE TESTING (ATP) INCLUDES, AMBIENT, VISUATION AND THERMAL-VAC TESTING, (SPAR/GOVERNMENT REP MANDATORY INSPECTIONS OF THE FILIGHT CABIN GOULPMENT TO FORM THE SRMS. INSPECTIONS ARE PERFORMED AT EACH PHASE OF INTEGRATION WHICH INCLUDES CROUNDING CHECKS, THRU WRITING CHECKS, VIRTUA ROUTING, INTERFACE CONNECTORS FOR BENT OR PUSH BACK CONTACTS ETC. SAMS SYSTEMS INSTEGRATION, THE INTEGRATION OF MECHANICAL ARM SUMMASSEMBLIES AND THE FILIGHT CABIN GOULPMENT TO FORM THE SRMS. INSPECTIONS ARE PERFORMED AT EACH PHASE OF INTEGRATION WHICH INCLUDES CROUNDING CHECKS, THRU WRITING CHECKS, VIRTUA ROUTING, INTERFACE CONNECTORS FOR BENT OR PUSH BACK CONTACTS ETC. SAMS SYSTEMS IESTING - STRONGBACK AND FLAT FLOOR AMBIENT PERFORMANCE TEST. (SPAR/GOVERNMENT REP MANDATORY INSPECTION POINT)
PREPARED		MING	SUPERCEDING DA	11E: 06 OC! 87	APPROVED BY: DATE: 26 JUL 91 CIL REV:

PROJECT: SRMS ASS'Y NOMENCLATURE: EEEU

SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: STAUFTT74-3E-5

SHEET: __ 5

Ef.	REV.	NAME OTY & DRAWENG REF. DESIGNATION	FAILURE HODE AND CAUSE	FAILURE EFFECT ON END ITEM	HDWR / FUNC. RATIONALE FOR ACCEPTANCE Z/IR CRITICALITY SCREENS: A-PASS, B-PASS, C-PASS
3330	3	COMMAND LOGIC GEY-1 REFERENCE SCHEMATIC 2563765	MOE: LOSS OF ALL EE PRIMARY FUNCTIONS. CAUSE(S): (1) U21, U22, U27 D OR C FAILS H. U22D FAILS L. CAPACITOR C37 FAILS S/C.	ARM REMAINS LIMP UNTIL EE MODE SW 10 OFF DURING AN AUTO CAPTURE SEQUENCE. CAUSE (1): EEEU WILL NOT PRODUCE A "HOTOR ENABLE" TO MOTOR ORIVE. NO COMMANDS WILL BE IMPLEMENTED.	THERE HAVE BEEN NO FAILURES ASSOCIATED WITH THIS FAILURE MODE ON THE SRMS PROGRAM.
			(2) U188 FAILS L. (3) U12 A. B OR C FAILS HIGH OR LOW.	CAUSE (2): EEEU WILL NOT PRODUCE BRAKE/ CLUTCH ACTIVATE SIGNALS. MOTOR WILL SLIP CLUTCH FOR ANY COMMAND.	·
				CAUSE (3): MOTOR MAY SLOW DOWN AND STOP, MOTOR MILL HOT START, SWARES MAY OPEN WITH REL CMD, EEEU BITE MAY HOT DETECT,	
				MORST CASE UMEXPECTED PAYLOAD MOTFON. INCOMPLETE CAPTURE/RELEASE SEQUENCE, UNABLE TO RELEASE PAYLOAD. CREW ACTION REQ.	
				REDUNDANT PATHS REMAINING DACKUP EE RELEASE.	

PREPARED BY:

MFWG

SUPERCEDING DATE: 06 OCT 87

DATE: 24 JUL 91

CIL REV: 1

PROJECT: SAMS ASS'Y NOMENCLATURE: EEEII SYSTEM: ELECTRICAL_SUBSYSTEM SIY P/N: 51140F1174-38-5

SHEET: 6 PHILIR / FUNC. RATIONALE FOR ACCEPTANCE HAME, QTY, & DRAWING REF. FAILURE HODE FAILURE EFFECT FHEA FMEA .1/1R ON REV. AND REF. END ITEM **CRITICALITY** SCREENS: A-PASS, B-PASS, C-PASS CAUSE DESIGNATION OPERATIONAL EFFECTS ARM REMAINS 3 COMMAND HODE: 3330 LOSS OF ALL LIMP UNTIL EE LOGIC GTY-1 EE PRIMARY MODE SW TO OFF REFERENCE UNABLE TO RIGIDIZE/DERIGIDIZE. IF FAILURE OCCURS DURING DURING AN AUTO SCHEMATIC FUNCTIONS. AIGIDIZE SEQUENCE, THE CARRIAGE WILL NOT COMPLETELY RIGIDIZE CAPTURE 2563765 AND ARM WILL REMAIN LIMP IF IN AUTO MODE. OPERATOR WILL DETECT CAUSE(9): SEQUENCE. (1) U21, U22, U27 D OR C FAILS CAUSE (1): OFF NOMINAL OPERATION OF THE EE. ÉEÉU WILL HOT CREW ACTION PRODUCE A "MOTOR ENABLE" UZZD FAILS TO MOTOR DRIVE. THE EE MODE SWITCH SHOULD BE TURNED OFF. CREW SHOULD OBSERVE L. CAPACITOR NO COMMANDS THE CAPTURE SEQUENCE AND DETERMINE THAT THE GRAPPLE FIXTURE C37 FAILS WILL BE HAS BEEN DRAWN FAR ENOUGH INTO THE EE TO PROHIBIT PAYLOAD INPLEMENTED. \$/C. ROTATIONS. LE THE INTERFACE DOES NOT APPEAR REGID, ATTEMPT TO RIGIDIZE IN THE ALTERNATE MODE. IF RIGIDIZE IS UNSUCCESSFUL, (2) U188 FAILS L. CAUSE (2): ATTEMPT RELEASE USING A PRIMARY EE MODE. IF SHARES OPEN, MANEUVER THE ARM AVAT FROM THE PAYLOAD. IF SHARES DON'T OPEN, EEEU WILL HOT PRODUCE BRAKE/ ATTEMPT TO RELEASE IN BACKUP MODE. IF SHARES OPEN, MANEUVER OR C FAILS CLUTCH ACTIVATE ARM AWAY FROM THE PAYLOAD, MANEUVER ORBITER AWAY FROM PAYLOAD. SIGNALS, MOTOR IF SHARES CANNOT BE OPENED IN ANY MODE, THEN THE ARM/PAYLOAD HIGH OR LOW. WILL SLIP COMBINATION CAN BE JETTISONNED. CLUTCH FOR ANY COMMUND. CREW TRAINING CAUSE (3): HOTOR MAY SLOW CREW TO BE TRAINED TO RECOGNIZE OFF HOMINAL OPERATION OF THE BE AND TO TURN HODE SWITCH TO OFF AFTER SPEC TIME AND MANEUVER DOWN AND STOP. HOTOR WILL HOT THE ORBITER AWAY FROM A FREE FLYING PAYLOAD AT ANY TIME DURING START. SHARES ARM OPERATIONS. MAY OPEN WITH REL CHD. EEEU DITE MAY NOT MISSION CONSTRAINT DETECT. WORST CASE WHEN CAPTURING A FREE FLYING PAYLOAD. THE EE MUST BE FAR ENDUGH AWAY FROM STRUCTURE TO PROHIBIT CONTACT REGARDLESS OF UNEMPECTED PAYLOAD MOTION. PAYLOAD ROTATIONS. INCOMPLETE CAPTURE/RELEASE SEQUENCE. CHRSD OFFLINE UHABLE TO RELEASE PAYLOAD. CREW ACTION PERFORM MANUAL EE CAPTURE VERIFY THAT OPEN FLAG AND CLOSE FLAG CHANGED STATE REDUNDANT PATHS CHRSD CHLINE INSTALLATION REMAINING BACKUP EE HONE RELEASE. OMRSD ONLINE TURNAROUND PERFORM MANUAL EE CAPTURE VERTEY THAT OPEN FLAG CHANGES TO BP AND CLOSE FLAG CHANGES TO GREY

PREPARED BY: HFVQ SUPERCEDING DATE: 06 OCT 87

APPROVED BY:

DATE: 24 JUL 91

CIE REV: 1

CRITICAL ITEMS LIST PROJECT: SRMS ASS'Y NOMENCLATURE: EEEU SYSTEM: ELECTRICAL SUBSYSTEM ASS'Y P/N: STIGOTTI74-38-5 SHEET: FHEA MAME, OTY, & DRAWING REF: THEA 1311 PRE MODE HOUR / FUNC. 2/1R CRIFICALITY FAILURE EFFECT RATIONALE FOR ACCEPTANCE REF. REV. AND ON DESIGNATION HISE END ITEM SCREENS: A-PASS, B-PASS, C-PASS 3330 3 ARM REMAINS LIMP UNTIL EE MODE SW TO OFF **ECHMAND** LOGIC 017-1 OF ALL REFERENCE SCHEMATIC 2563765 IMARY DURING AN AUTO CAPTURE tron (1085. CAUSE(\$): SEQUENCE. CAUSE (1): (1) U21, U22, U27 D QR C FAILS EEEU WILL NOT PRODUCE À "MOTOR ENABLE" U22D FAILS L. CAPACITOR C37 FAILS TO MOTOR DRIVE. WILL BE IMPLEMENTED. CAUSE (2): EEEU WILL NOT PRODUCE BRAKE/ (2) U188 FAILS L. (3) U12 A, B OR C FAILS HIGH OR LOW. CLUTCH ACTIVATE SIGNALS, MOTOR WILL SLIP CLUTCH FOR ANY COMMAND. CAUSE (3): MOTOR MAY SLOW DOWN AND STOP. MOTOR WELL HOT START, SNARES MAY OPEN WITH REL CHO. EEEU BITE MAY NOT DETECT. WORST CASE UNEXPECTED PAYLOAD MOTION. INCOMPLETE CAPTURE/RELEASE SEQUENCE. UNABLE TO RELEASE PAYLOAD. CREW ACTION REDUNDANT PATHS REMAINING BACKUP EE RELEASE. PREPARED 8Y: HFWG SUPERCEDING DATE: 06 OCT 87 DATE: 24 JUL 91

CIL REV: 1